

Bridge Culvert Inspection			
Bridge File Number	70180 -1 Bridge Culvert	Form Type	CUL1
Year Built	1954	Lot No.	4
Bridge or Town Name	BROSSEAU	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.26, WATERCRS-ST	Inspector Class	BR CLS A
Located On	29:08 C1 4.681	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Jan-2013
Legal Land Location	NW SEC 2 TWP 56 RGE 12 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:41:17, 53:48:55	Data Entry Date	12-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA14	Review Date	19-Jan-2013
Clear Roadway/Skew	10.1 /	Dept. Reviewer Name	
AADT/Year	1,610 / 2012 (A)	Dept. Review Date	
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2134	1524	RPP	35.4	152X51	2.8	PIPE ARCH
Special Features	BARREL DEICING PIPE							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Plowed in West ditch.	Gas	
Power	3 wire OH @ 30m East of c/l, E fenceline.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	
Vertical Alignment	9	9	
Roadway Width (m)	10.100		
Embankment	8	N	Snow covered, but no signs of problems.
Sideslope (__:1)	5.0		
(Height of Cover(m) : 1.6)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	9	9	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	Slightly damaged edges.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1524, Type: RPP)				
Barrel Last Accessible Date	10-Jan-2013			
Special Features				
Special Feature		3	3	25mm dia pipe strapped to both ends at roof line. Serves as steam access to thaw ice accumulations. Appears to have not been used recently and in disrepair since some connectors are broken.
(Type : BARREL DEICING PIPE)				
Special Feature				
(Type :)				
Roof		6	6	Could not measure rise due to ice.
Measured Rise (mm)	1520			
Measured At Ring No.	5			
Sag (mm)	4			(0.2%. 08Dec2010).
Percent Sag	0			
Sidewall		6	6	Span at R2=2112=22mm=1.0% Span at R6=2152=18mm Span at R10=2147=13mm
Measured Span (mm)	2112			
Measured At Ring No.	2			
Deflection (mm)	22			Inwards at R2
Percent Deflection	1			
Floor		N	N	(Heavy scaling along floor. 15Aug2009). Ice over. Previous r=4.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		5	5	Missing bolt @ L-7 South side.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	(Heavy scaling along floor. 15Aug2009). Iced over. R=4 carried forward.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Slight negative camber.
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1524, Type: RPP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	N	Snow covered, but no visible problems.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Not a well defined channel.
Bank Stability		8	8	Major dugout excavated U/S 150m.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION	2013	Replace connectors on deicing pipe.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/	Sufficiency Rating (Last/Now) (%)	68.1/	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Check floor corrosion when visible.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	10-Oct-2014		Previous Inspection Date	08-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							